

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: September 10, 1993
Date Received: September 7, 1993 *Hydroxide*
Project: 7238, ~~Hydraulic~~ Sludge, PO# M30743
Date Samples Extracted: September 7, 1993
Date Extracts Analyzed: September 8, 1993

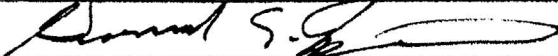
**RESULTS FROM THE ANALYSIS OF THE SLUDGE SAMPLE
FOR TCLP METALS IN ACCORDANCE WITH
40 CFR PART 261
Results Reported as mg/L (ppm)**

<u>Sample #</u>	<u>Chromium</u>	<u>Copper</u>	<u>Nickel</u>	<u>Zinc</u>
M30743	<0.5	19	160	0.9
Regulatory Level	5.0			
<u>Quality Assurance</u>				
Blank	<0.5	<0.5	<0.5	<0.5
M30743 (Duplicate)	<0.5	2.0	160	0.8
M30743 (Matrix Spike) % Recovery	105%	102%	ai	103%
M30743 (Matrix Spike Duplicate) % Recovery	106%	102%	ai	102%
Spike Blank % Recovery	110%	106%	111%	115%
Spike Level	50	50	100	50

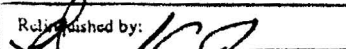

^{ai} The amount spiked was insufficient to give meaningful recovery data.

9-BTB-E
9-7-93
10:53

Send Report To Alaskan Copper Works Contact Gerald Thompson
Company P.O. Box 3546
Address Seattle WA 98124
City, State, Zip (206) 623-5800
Phone # 9-8-93
Date

SITE NO.		PROJECT NAME		PURCHASE ORDER #	
7278		Hydroxide Sludge		M 30743	
SAMPLERS (signature)				PROJECT LOCATION	
				3200 6th Ave S	
REMARKS				SAMPLE DISPOSAL INFORM.	
				<input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Return Samples <input type="checkbox"/> Call for Instructions	

[illegible]

SIGNATURE	PRINT NAME	COMPANY	Date	Time
Relinquished by: 	Gerald Thompson	Askan Corp	9/7/93	
Received by: 	C. Hicks	F & B Inc	9-7-93	
Relinquished by:				
Received by:				

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Andrew John Friedman
James E. Bruya, Ph.D.
(206) 285-8282

3008-B 16th Avenue West
Seattle, WA 98119
FAX: (206) 283-5044

September 10, 1993

DUPLICATE COPY

INVOICE # 93ACU0910-1

Alaskan Copper Works
628 South Hanford
Seattle, WA 98134

RE: Project 7238, Hydraulic Sludge, PO# M30743: Results of testing requested
by Gerald Thompson, Project Leader and submitted on September 7, 1993.

1 sludge sample analyzed for TCLP Metals
@ \$140 per sample

\$ 140.00

Amount Due

\$ 140.00

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September 10, 1993

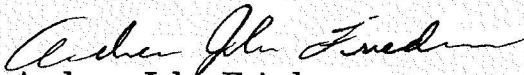
Gerald Thompson, Project Leader
Alaskan Copper Works
628 South Hanford
Seattle, WA 98134

Dear Mr. Thompson:

Enclosed are the results from the testing of material submitted on September 7, 1993 from Project 7238, Hydraulic Sludge, PO# M30743.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,



Andrew John Friedman
Chemist

AJF/sao

Enclosures